

REMARKS

Claims 1-31 were presented for examination. The Office Action dated June 4, 2003 rejects claims 1-20 and 24-31, and deems claims 21-23 to be allowable if rewritten in independent form. This Amendment and Response amends claims 4, 7, 8, 11, 12, 14-21, 23, 25, and 27-31, adds new claims 32-36, and cancels claims 1-3, 5, 6, 9, 10, and 13. New independent claim 32 substitutes for canceled claim 1 and new independent claim 34 substitutes for canceled claim 10. Claims 4, 7, 8, 11, 12, 14-36 are now pending in the application.

Claims 18 and 25 are amended to recite language that more clearly distinguishes the invention from the cited references. Amendments to claims 4, 7, 8, 11, 12, 14-17 are made to adjust claim dependencies and claim language necessitated by the canceling of claims 1 and 10 and substitution of claims 32 and 34 in their stead. Such amendments are not made to narrow or to respond to any objection or rejection raised by the Office Action. Amendments to claims 19-21, 23, and 27-31 are made either to correct informalities or to more clearly describe the invention, but are not made to narrow or to respond to any objection or rejection raised by the Office Action.

Rejection of claims 1-17 under 35 U.S.C. § 112

The Office Action rejects to claims 1-17 for indefiniteness because of the claimed limitation of "flow control mechanisms present at said data terminal operate to compensate for the change from said first to said second BW." This paper cancels claims 1 and 10, and substitutes new independent claims 32 and 34, respectively. The substitute claims do not recite the rejected language, and therefore the Applicants respectively submit that the rejection with respect to these new independent claims is moot. To the extent that the rejection is maintained against new dependent claims 33 and 36, the Applicants refer to lines 11-23 and 20-22 on page 9 of the specification to show, by example, what is meant by a flow control message.



Rejection of Claims 1-17 under 35 U.S.C. § 103

The Office Action also rejects claims 1-17 and 25 under 35 U.S.C. 103(a) as being unpatentable over Steven Chapman (U.K. Patent Application No. GB 2286745A) in view of Sawey (U.S. Patent No. 6,195,330 B1). Applicants respectfully traverse the rejection to the extent it is maintained against the claims as amended. The Applicants' invention, as now set forth in newly added representative claim 32, establishes a data pipe between a pair of end nodes in a transport network. Bandwidth is allocated to traffic for transmission over a working route of the data pipe. A protection switch operation is performed and, during the protection switch operation, the bandwidth allocated to the traffic is reduced for transmission over a protection route of the data pipe.

Chapman teaches a protection switching arrangement between nodes in a telecommunications network. In this arrangement, one protection channel operates to protect a plurality of working channels. When one working channel faults, the traffic on the failing working channel is switched to the protection channel. Unlike the Applicants' claimed invention, however, Chapman does not disclose or suggest reducing the bandwidth allocated to the traffic when the traffic is switched to the protection channel.

Sawey teaches a mechanism for performing a "hit-less" switch (i.e., without loss of data) between a working signal and a protect signal in a communication network. The mechanism employs delay buffers for aligning the signals to achieve the hit-less switch. Whereas such buffers accomplish a necessary timing alignment between the working and protect signals for hit-less switching, they do not reduce the bandwidth allocated to the protect signal (from that previously allocated to the working signal) during the protection switch. Rather, Sawey's switch between the working signal and protect signal occurs "in a manner transparent" to those receiving the payload carried on the network (col. 4, lines 63-68). Such transparent switching implies no change in bandwidth. Therefore, Sawey, like Chapman, does not disclose or suggest reducing the bandwidth allocated to traffic during a protection switch operation, as now set forth in the Applicants' claimed invention. Thus, Chapman and Sawey, taken alone or in combination, fail to disclose or suggest every claimed limitation of the



Applicants' invention, and therefore the Applicants respectfully submit that the rejection is overcome.

With respect to new independent claim 34, the Applicants' invention distributes a total bandwidth between a first route and a second route, transmits unprotected traffic on both routes, and switches the unprotected traffic from the first route to the second route when transmission on the first route is interrupted. Neither Chapman nor Sawey disclose or suggest switching unprotected traffic from a first route, when transmission on the first route is interrupted, to a second route that also is carrying unprotected traffic at the time of the interruption. Therefore, the Applicants respectfully submit that the rejection of claim 34 is overcome.

Claim 25 recites similar language as claim 32, therefore are also patentably distinguishable over the cited references for at least those reasons provided in connection with claim 32.

Claims 4, 7, 8, 11, 12, 14-17, and 26-31 depend directly or indirectly from patentable independent claims 25, 32 and 34, and incorporate all of their limitations, and therefore are also patentably distinguishable over the cited references for at least those reasons provided in connection with claims 25, 32, 34. Therefore, the Applicants respectfully submit that the rejection against these claims is also overcome.

Rejection of Claims 18-20 and 24-31 under 35 U.S.C. § 103

The Office Action also rejects claims 18-20 and 24-31 under 35 U.S.C. 103(a) as being unpatentable over Steven Chapman in view of Klish (U.S. Patent No. 6,014,708 B1). Applicants respectfully traverse the rejection to the extent it is maintained against the claims as amended. The Applicants' invention, as now set forth in representative claim 18, includes, in pertinent part, an adaptive rate interface for changing the transmit and receive rate of traffic from a fast rate to a slow rate during a protection switch and from the slow rate to the fast rate upon return to normal operation from the protection switch. The arguments presented above



with respect to claim 32, in general, and to Chapman, in particular, are reiterated. Chapman does not disclose or suggest an interface for reducing the rate of traffic during a protection switch.

Klish teaches an adaptor that can be configured to map Ethernet signals to SONET signals at one of two rates, 100Mbs or 150Mbs. The basis for deciding which rate to use is whether an input signal to the adaptor indicates the 150Mbps signal is under-utilized. Klish's adaptor, however, does not teach or suggest an adapter interface that changes the transmit and receive rate of traffic from a fast rate to a slow rate during a protection switch, as now set forth in the Applicants' claimed invention. Thus, Chapman and Klish, taken alone or in combination, fail to disclose or suggest every claimed limitation of the Applicants' invention, and therefore the Applicants respectfully submit that the rejection is overcome.

Claims 19, 20, and 24-31 depend directly or indirectly from patentable independent claims 18 and 25 and incorporate all of their limitations, and therefore are also patentably distinguishable over the cited references for at least those reasons provided in connection with claims 18 and 25. Therefore, the Applicants respectfully submit that the rejection against these claims is also overcome.



CONCLUSION

In view of the arguments made herein, Applicants submit that the application is in condition for allowance and requests early favorable action by the Examiner.

If the Examiner believes that a telephone conversation with the Applicants' representative would expedite allowance of this application, the Examiner is cordially invited to call the undersigned at (508) 303-2003.

Respectfully submitted,

Date: 9/2/03 Reg. No. 41,274

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